

Amendment to the Claims:

Please amend claims 1, 2, 4-9 as follows:

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1. (Currently amended) A television signal transmitter comprising:
a local oscillator ~~for outputting~~ that outputs a local oscillation signal;
a mixer ~~for mixing~~ that mixes a supplied television intermediate frequency signal with
the local oscillation signal and ~~frequency-converting~~ frequency-converts a resultant signal to a
television signal of a specific channel through which the signal is to be transmitted among
television channels; and
a variable band-pass filter connected at a post stage of the mixer and tuned to a frequency
of the specific channel,
wherein a tuning frequency of the variable band-pass filter can be shifted to a frequency
out of a frequency band of the specific channel.
2. (Currently amended) A television signal transmitter according to claim 1, wherein
the variable band-pass filter is tuned in a range from a first frequency to a second frequency, the
specific channel is set between the first frequency and the second frequency, and a the frequency
out of the band is lower than the first frequency or is higher than the second frequency.
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3. (Original) A television signal transmitter according to claim 2, wherein when the
frequency of the specific channel is higher than a middle frequency between the first and second
frequencies, the frequency out of the band is set to be equal to or lower than the first frequency,
and when the frequency of the specific channel is lower than the middle frequency, the frequency
out of the band is set to be equal to or higher than the second frequency.
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4. (Currently Amended) A television signal transmitter according to claim 1
comprising:

a local oscillator that outputs a local oscillation signal;

a mixer that mixes a supplied television intermediate frequency signal with the local oscillation signal and frequency-converts a resultant signal to a television signal of a specific channel through which the signal is to be transmitted among television channels; and

a variable band-pass filter connected at a post stage of the mixer and tuned to a frequency of the specific channel, wherein a tuning frequency of the variable band-pass filter can be shifted to a frequency out of a frequency band of the specific channel.

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wherein the local oscillator is provided with a first varactor diode for changing the frequency of the local oscillation signal, the variable band-pass filter is provided with a second varactor diode for changing the tuning frequency, the television signal transmitter further comprises: a memory in which data for setting the frequency of the local oscillation signal and the tuning frequency is stored; a D/A converter ~~for converting~~ that converts the data into a d.c. voltage; a first external power source; voltage adding means to which the d.c. voltage is supplied; and first switching means, the d.c. voltage is applied to the first varactor diode, a voltage outputted from the voltage adding means is applied to the second varactor diode, and the voltage of the first external power source is enabled to be applied to the voltage adding means by the first switching means.

5. (Currently Amended) A television signal transmitter according to claim 2 4,

~~wherein the local oscillator is provided with a first varactor diode for changing the frequency of the local oscillation signal, the variable band-pass filter is provided with a second varactor diode for changing the tuning frequency, the television signal transmitter further comprises: a memory in which data for setting the frequency of the local oscillation signal and the tuning frequency is stored; a D/A converter for converting the data into a d.c. voltage; a first~~

external power source; voltage adding means to which the d.c. voltage is supplied; and first switching means, the d.c. voltage is applied to the first varactor diode, a voltage outputted from the voltage adding means is applied to the second varactor diode, and the voltage of the first external power source is enabled to be applied to the voltage adding means by the first switching means;

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wherein the variable band-pass filter is tuned in a range from a first frequency to a second frequency, the specific channel is set between the first frequency and the second frequency, and the frequency out of the band is lower than the first frequency or is higher than the second frequency.

6. (Currently Amended) A television signal transmitter according to claim 3 5, wherein the local oscillator is provided with a first varactor diode for changing the frequency of the local oscillation signal, the variable band pass filter is provided with a second varactor diode for changing the tuning frequency, the television signal transmitter further comprises: a memory in which data for setting the frequency of the local oscillation signal and the tuning frequency is stored; a D/A converter for converting the data into a d.c. voltage; a first external power source; voltage adding means to which the d.c. voltage is supplied; and first switching means, the d.c. voltage is applied to the first varactor diode, a voltage outputted from the voltage adding means is applied to the second varactor diode, and the voltage of the first external power source is enabled to be applied to the voltage adding means by the first switching means;

wherein when the frequency of the specific channel is higher than a middle frequency between the first and second frequencies, the frequency out of the band is set to be equal to or lower than the first frequency, and when the frequency of the specific channel is lower than the

middle frequency, the frequency out of the band is set to be equal to or higher than the second frequency.

7. (Currently Amended) A television signal transmitter according to claim 1 comprising:

a local oscillator that outputs a local oscillation signal;

a mixer that mixes a supplied television intermediate frequency signal with the local oscillation signal and frequency-converts a resultant signal to a television signal of a specific channel through which the signal is to be transmitted among television channels; and

a variable band-pass filter connected at a post stage of the mixer and tuned to a frequency of the specific channel, wherein a tuning frequency of the variable band-pass filter can be shifted to a frequency out of a frequency band of the specific channel,

wherein the local oscillator is provided with a first varactor diode for changing the frequency of the local oscillation signal, the variable band-pass filter is provided with a second varactor diode for changing the tuning frequency, the television signal transmitter further comprises: a memory in which data for setting the frequency of the local oscillation signal and the tuning frequency is stored; a D/A converter ~~for converting~~ that converts the data into a d.c. voltage; a second external power source; a third external power source; and second switching means, the d.c. voltage is applied to the first varactor diode, and one of the d.c. voltage, a voltage of the second external power source, and a voltage of the third external power source can be applied to the second varactor diode by the second switching means.

8. (Currently Amended) A television signal transmitter according to claim 2 ~~7~~
~~wherein the local oscillator is provided with a first varactor diode for changing the frequency of the local oscillation signal, the variable band pass filter is provided with a second~~

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~~varactor diode for changing the tuning frequency, the television signal transmitter further comprises: a memory in which data for setting the frequency of the local oscillation signal and the tuning frequency is stored; a D/A converter for converting the data into a d.c. voltage; a second external power source; a third external power source; and second switching means, the d.c. voltage is applied to the first varactor diode, and one of the d.c. voltage, a voltage of the second external power source, and a voltage of the third external power source can be applied to the second varactor diode by the second switching means,~~

wherein the variable band-pass filter is tuned in a range from a first frequency to a second frequency, the specific channel is set between the first frequency and the second frequency, and the frequency out of the band is lower than the first frequency or is higher than the second frequency.

9. (Currently Amended) A television signal transmitter according to claim 3 8,
~~wherein the local oscillator is provided with a first varactor diode for changing the frequency of the local oscillation signal, the variable band pass filter is provided with a second varactor diode for changing the tuning frequency, the television signal transmitter further comprises: a memory in which data for setting the frequency of the local oscillation signal and the tuning frequency is stored; a D/A converter for converting the data into a d.c. voltage; a second external power source; a third external power source; and second switching means, the d.c. voltage is applied to the first varactor diode, and one of the d.c. voltage, a voltage of the second external power source, and a voltage of the third external power source can be applied to the second varactor diode by the second switching means,~~

wherein when the frequency of the specific channel is higher than a middle frequency between the first and second frequencies, the frequency out of the band is set to be equal to or

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lower than the first frequency, and when the frequency of the specific channel is lower than the middle frequency, the frequency out of the band is set to be equal to or higher than the second frequency.